

IN THE SPECIFICATION

Page 3, line 26 to page 5, line 5, replace with the following paragraph:

Namely, according to this invention, there is provided a gas barrier film which comprises;

a polypropylene film whose surface is bonded with tuning molecular chains having, as a main skeleton, an -O-Si-O- structure by enabling the oxygen (-O-) thereof to be bonded to carbon atoms of the surface of the polypropylene film; and

an a  $\text{SiO}_x$  thin film formed on the surface of the polypropylene film where the tuning molecular chains are bonded, the  $\text{SiO}_x$  thin film being bonded to the tuning molecular chains interposed between the polypropylene film and the  $\text{SiO}_x$  thin film.

There is also provided a method of manufacturing a gas barrier film having polypropylene as a base film, the method comprising the steps of;

activating carbon atoms of a surface of the polypropylene film by subjecting the polypropylene film to a plasma treatment, the activated carbon atoms being subsequently exposed to air atmosphere to allow the activated carbon atoms to be bonded with oxygen, thereby introducing oxygen functional groups into the surface of the polypropylene film;

allowing a coupling reaction to take place between the oxygen functional group of the polypropylene film and a silane coupling agent, thereby bonding tuning molecular chains having, as a main skeleton, an -O-Si-O- structure, to carbon atoms of the surface of the polypropylene film through the oxygen functional group (-O-); and

allowing a plasma polymerization between Si and O in a plasma atmosphere containing an organic silane compound and oxygen, thereby forming an a  $\text{SiO}_x$  thin film on the surface of the polypropylene film having the tuning molecular chains bonded therein.